

## SCECAP 2001-2002

## Water, sediment, and biological cut points

Parameter	Criteria	Percent of Tidal Creek Habitat			Percent of Open Water Habitat			
		Lower CL	Percent	Upper CL	Lower CL	Percent	Upper CL	
<b>WATER QUALITY</b>								
<b>Salinity</b>	≤ 5	--	0	--	--	0	--	
ppt (25 Hr mean - bottom)	≤ 18	3	11	19	0	7	14	
	≤ 30	15	27	39	25	37	49	
	> 30	--	73	--	--	63	--	
<b>Dissolved Oxygen (DO)</b>	< 3	1	9	17	--	3	7	
mg/l (25 Hr mean - bottom)	< 4	11	22	33	3	11	19	
	< 5	49	62	75	25	37	50	
	≥ 5	--	38	--	--	63	--	
<b>Dissolved Oxygen (DO)</b>	< 3	1	9	16	--	3	7	
mg/l (Instantaneous - bottom)	< 4	25	38	51	5	13	22	
	< 5	65	76	87	42	55	67	
	≥ 5	--	24	--	--	45	--	
<b>Dissolved Oxygen (DO)</b>	< 3	1	9	17	--	0	--	
mg/l (Instantaneous - surface)	< 4	20	33	45	1	8	15	
	< 5	51	63	76	37	49	62	
	≥ 5	--	37	--	--	51	--	
<b>pH</b>	< 7.1	0	4	10	--	0	--	
(25 Hr mean - bottom)	< 7.4	7	17	27	0	5	11	
based on 99_00 pristine creeks only	≥ 7.4	--	83	--	--	95	--	
<b>Total Kjeldahl Nitrogen (TKN)</b>	≤ 0.81	84	92	100	86	93	100	
mg/l	≤ 1.06	74	98	100	36	99	100	
	> 1.06	--	2	--	--	1	--	
<b>Nitrate / Nitrite</b>	≤ 0.14	64	98	100	77	87	96	
mg/l	≤ 0.23	--	2	--	90	96	100	
	> 0.23	--	0	--	--	4	--	
<b>Total Nitrogen (TN)</b>	≤ 0.95	90	96	100	91	96	100	
(TKN + NOx - mg/l)	≤ 1.29	98	99	100	100	100	100	
	> 1.29	--	1	--	--	0	--	

Parameter	Criteria	Percent of Tidal Creek Habitat			Percent of Open Water Habitat		
		Lower CL	Percent	Upper CL	Lower CL	Percent	Upper CL
Total Dissolved Nitrogen (TDN) mg/l	< 0.1	--	<b>0</b>	--	--	<b>0</b>	--
	< 1.0	86	<b>93</b>	100	--	<b>100</b>	--
	≥ 1.0	--	<b>7</b>	--	--	<b>0</b>	--
Dissolved Inorganic Nitrogen (DIN) mg/l	< 0.1	48	<b>61</b>	74	47	<b>60</b>	72
	≤ 0.5	--	<b>100</b>	--	95	<b>98</b>	100
	> 0.5	--	<b>0</b>	--	--	<b>2</b>	--
Ammonia Nitrogen mg/l	≤ 0.28	65	<b>78</b>	90	67	<b>80</b>	92
	≤ 0.48	76	<b>86</b>	97	77	<b>87</b>	97
	≤ 0.60	82	<b>91</b>	99	83	<b>92</b>	100
	> 0.60	--	<b>9</b>	--	--	<b>8</b>	--
Total Phosphorus (TP) mg/l	≤ 0.09	70	<b>80</b>	91	78	<b>87</b>	95
	≤ 0.17	89	<b>95</b>	100	99	<b>99</b>	100
	> 0.17	--	<b>5</b>	--	--	<b>1</b>	--
Total Dissolved Phosphorus (TDP) mg/l	< 0.01	3	<b>12</b>	21	2	<b>10</b>	18
	< 0.10	90	<b>95</b>	100	--	<b>90</b>	--
	≥ 0.10	--	<b>5</b>	--	--	<b>0</b>	--
Dissolved Inorganic Phosphorus (DIP) mg/l	< 0.01	4	<b>13</b>	21	0	<b>7</b>	14
	≤ 0.05	80	<b>88</b>	97	89	<b>94</b>	100
	≥ 0.05	--	<b>12</b>	--	--	<b>6</b>	--
Biochemical Oxygen Demand (BOD <sub>5</sub> ) mg/l	≤ 1.8	69	<b>80</b>	91	78	<b>87</b>	95
	≤ 2.6	86	<b>93</b>	100	95	<b>98</b>	100
	> 2.6	--	<b>7</b>	--	--	<b>2</b>	--
Total Organic Carbon (TOC) mg/l	≤ 11	93	<b>97</b>	100	89	<b>95</b>	100
	≤ 16	--	<b>100</b>	--	--	<b>100</b>	--
	> 16	--	<b>0</b>	--	--	<b>0</b>	--
Fecal Coliform colonies / 100ml	≤ 43	80	<b>88</b>	97	87	<b>94</b>	100
	≤ 400	47	<b>99</b>	100	0	<b>100</b>	--
	> 400	--	<b>1</b>	--	--	<b>0</b>	--

Parameter	Criteria	Percent of Tidal Creek Habitat			Percent of Open Water Habitat		
		Lower CL	Percent	Upper CL	Lower CL	Percent	Upper CL
Alkalinity mg/l	≤ 98	7	17	27	16	27	39
	≤ 110	38	51	64	76	85	94
	≤ 114	47	59	71	86	91	96
	≤ 125	90	95	100	--	100	--
	> 125	--	5	--	--	0	--
Turbidity NTU	≤ 15	36	50	64	65	76	87
	≤ 25	70	81	92	81	89	97
	> 25	--	19	--	--	11	--
WQ Score (with nutr) continuous	≤ 1	0	5	11	--	0	--
	≤ 3	11	22	33	3	12	18
	> 3	61	73	85	80	88	96
<b>SEDIMENT QUALITY</b>							
Sediment Composition % Sand	< 20	5	14	23	0	6	13
	≤ 80	34	47	60	21	33	46
	> 80	--	53	--	--	67	--
Total Organic Carbon (TOC) %	≤ .05	--	0	--	0	6	12
	≤ 3	75	85	94	84	91	98
	> 3	--	15	--	--	9	--
Porewater Ammonia (TAN) mg/l	≤ 14	95	98	100	95	98	100
	≤ 30	--	100	--	--	100	--
	> 30	--	0	--	--	0	--
Contaminants ERM-Q	≤ 0.020	65	76	87	71	81	91
	≤ 0.058	--	100	--	93	97	100
	> 0.058	--	0	--	--	3	--
Toxicity	None	8	18	28	8	18	28
	1 of 3	41	55	68	23	35	47
	≥ 2 of 3	15	27	39	34	47	59
Integrated Sediment Score	≤ 1	--	0	--	0	2	5
	≤ 3	27	40	53	17	30	40
	> 3	47	60	73	58	70	82

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<b>BIOLOGY</b>							
Chlorophyll A µg/l	≤ 12	59	71	83	78	87	95
	≤ 20	96	99	100	86	93	99
	> 20	--	1	--	--	7	--
Benthic-IBI	≤ 1.5	0	4	9	0	3	8
	≤ 2.5	19	31	43	7	17	26
	> 2.5	--	69	--	--	83	--
Overall Integrated Measure Habitat Quality Score	≤ 2.3	--	0	--	0	2	6
	≤ 3.7	12	24	35	7	17	26
	> 3.7	--	76	--	--	81	--